

SEQUENCE LISTING

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<120> MKK7 Activation Inhibitor

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<160> 46

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<210> 1  
<211> 7  
<212> PRT  
<213> Homo sapiens

<220>

<221> MISC\_FEATURE  
<223> Partial sequence of MKK7, which is highly homologous to that (SEQ ID NO:3) of PAK4

<400> 1

Asp Val Trp Ser Leu Gly Ile  
1 5

<210> 2  
<211> 6  
<212> PRT  
<213> Homo sapiens

<220>

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<223> Partial sequence of MKK7, which is highly homologous to that (SEQ ID NO:4) of PAK4

<400> 2

Pro Pro Ala Arg Pro Arg  
1 5

<210> 3  
<211> 7  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> MISC\_FEATURE  
<223> Partial sequence of PAK4, which is highly homologous to that (SEQ ID NO:1) of MKK7

<400> 3

Asp Ile Trp Ser Leu Gly Ile  
1 5

<210> 4  
<211> 6  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> MISC\_FEATURE  
<223> Partial sequence of PAK4, which is highly homologous to that (SEQ ID NO:2) of MKK7

<400> 4

Pro Pro Ala Arg Ala Arg  
1 5

<210> 5  
<211> 6  
<212> PRT  
<213> Homo sapiens  
  
<220>  
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<223> Partial sequence of MKK7, which is highly homologous to that (SEQ ID NO:7) of JIK

<400> 5

Trp Ser Leu Gly Ile Ser  
1 5

<210> 6  
<211> 6  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Partial sequence of MKK7, which is highly homologous to that (SEQ ID NO:8) of JIK

<400> 6

Leu Glu Ala Lys Leu Lys  
1 5

<210> 7  
<211> 6  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Partial sequence of JIK, which is highly homologous to that (SEQ ID NO:5) of MKK7

<400> 7

Trp Ser Leu Gly Ile Thr  
1 5

<210> 8  
<211> 6  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Partial sequence of JIK, which is highly homologous to that (SEQ ID NO:6) of MKK7

<400> 8

Leu Glu Asn Lys Leu Lys  
1 5

<210> 9  
<211> 24  
<212> PRT  
<213> Homo sapiens

<220>  
<221> MISC\_FEATURE  
<223> Partial sequence of MKK7, showing high score in the local alignment between MKK7 and PAK4

<400> 9

Tyr Asp Ile Arg Ala Asp Val Trp Ser Leu Gly Ile Ser Leu Val Glu  
1 5 10 15

Leu Ala Thr Gly Gln Phe Pro Tyr  
20

<210> 10

<211> 24

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 10

Tyr Gly Pro Glu Val Asp Ile Trp Ser Leu Gly Ile Met Val Ile Glu  
1 5 10 15

Met Val Asp Gly Glu Pro Pro Tyr  
20

<210> 11

<211> 5

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence identical in the sequences of MKK7, PAK4 and JIK

<400> 11

Trp Ser Leu Gly Ile  
1 5

<210> 12

<211> 32

<212> PRT

<213> Homo sapiens

<220>

<221> MISC\_FEATURE

<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and PAK4

<400> 12

Leu Glu Asn Leu Gly Glu Met Gly Ser Gly Thr Cys Gly Gln Val Trp  
1 5 10 15

Lys Met Arg Phe Arg Lys Thr Gly His Val Ile Ala Val Lys Gln Met  
20 25 30

<210> 13

<211> 32

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 13

Leu Asp Asn Phe Ile Lys Ile Gly Glu Gly Ser Thr Gly Ile Val Cys  
1 5 10 15

Ile Ala Thr Val Arg Ser Ser Gly Lys Leu Val Ala Val Lys Lys Met  
20 25 30

<210> 14

<211> 14

<212> PRT

<213> Homo sapiens

<220>

<221> MISC\_FEATURE

<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and PAK4

<400> 14

Pro Thr Pro Pro Ala Arg Pro Arg His Met Leu Gly Leu Pro  
1 5 10

<210> 15

<211> 14

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 15

Pro Pro Pro Pro Ala Arg Ala Arg Gln Glu Asn Gly Met Pro  
1 5 10

<210> 16

<211> 4

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence identical in the sequences of MKK7 and PAK4

<400> 16

Pro Pro Ala Arg

1

<210> 17

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and PAK4

<400> 17

Leu Thr Lys Asp His Arg Lys Arg Pro Lys Tyr Asn Lys Leu Leu Glu  
1 5 10 15

His Ser Phe Ile Lys Arg

20

<210> 18

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 18

Leu Val Arg Asp Pro Ala Gln Arg Ala Thr Ala Ala Glu Leu Leu Lys  
1 5 10 15  
His Pro Phe Leu Ala Lys  
20

<210> 19

<211> 31  
<212> PRT  
<213> Homo sapiens

<220>

<221> misc\_feature  
<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and PAK4

<400> 19

Val Val Leu Lys Ser His Asp Cys Pro Tyr Ile Val Gln Cys Phe Gly  
1 5 10 15

Thr Phe Ile Thr Asn Thr Asp Val Phe Ile Ala Met Glu Leu Met  
20 25 30

<210> 20

<211> 31  
<212> PRT  
<213> Homo sapiens

<220>

<221> misc\_feature  
<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 20

Val Ile Met Arg Asp Tyr Gln His Glu Asn Val Val Glu Met Tyr Asn  
1 5 10 15

Ser Tyr Leu Val Gly Asp Glu Leu Trp Val Val Met Glu Phe Leu  
20 25 30

<210> 21

<211> 33  
<212> PRT  
<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment between MKK7 and PAK4

<400> 21

Asp Ile Ser Pro Gln Arg Pro Arg Pro Thr Leu Gln Leu Pro Leu Ala  
1 5 10 15

Asn Asp Gly Gly Ser Arg Ser Pro Ser Ser Glu Ser Ser Pro Gln His  
20 25 30

Pro

<210> 22

<211> 34

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of PAK4, showing high score in the local alignment between MKK7 and PAK4

<400> 22

Asp Val Ala Pro Asn Gly Pro Ser Ala Gly Gly Leu Ala Ile Pro Gln  
1 5 10 15

Ser Ser Ser Ser Ser Arg Pro Pro Thr Arg Ala Arg Gly Ala Pro  
20 25 30

Ser Pro

<210> 23

<211> 15

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment between MKK7 and PAK4

<400> 23

Ser Glu Ser Ser Pro Gln His Pro Thr Pro Pro Ala Arg Pro Arg

1

5

10

15

<210> 24  
<211> 15  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 24

Pro Gln Ser Ser Ser Ser Ser Arg Pro Pro Thr Arg Ala Arg  
1 5 10 15

<210> 25  
<211> 20  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and PAK4

<400> 25

Gly Gly Ser Arg Ser Pro Ser Ser Glu Ser Ser Pro Gln His Pro Thr  
1 5 10 15

Pro Pro Ala Arg  
20

<210> 26  
<211> 20  
<212> PRT  
<213> Homo sapiens

<220>  
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<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 26

Gly Gly Leu Ala Ile Pro Gln Ser Ser Ser Ser Ser Arg Pro Pro  
1 5 10 15

Thr Arg Ala Arg  
20

<210> 27

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and PAK4

<400> 27

Ile Ser Pro Gln Arg Pro Arg Pro Thr Leu Gln Leu Pro Leu Ala Asn  
1 5 10 15

Asp Gly Gly Ser Arg Ser  
20

<210> 28

<211> 21

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of PAK4, showing high score in the local alignment  
between MKK7 and PAK4

<400> 28

Val Ser His Glu Gln Phe Arg Ala Ala Leu Gln Leu Val Val Asp Pro  
1 5 10 15

Gly Asp Pro Arg Ser  
20

<210> 29

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and JIK

<400> 29

Tyr Asp Ile Arg Ala Asp Val Trp Ser Leu Gly Ile Ser Leu Val Glu  
1 5 10 15  
Leu Ala

<210> 30

<211> 18

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of JIK, showing high score in the local alignment  
between MKK7 and JIK

<400> 30

Tyr Asp Gly Lys Val Asp Ile Trp Ser Leu Gly Ile Thr Cys Ile Glu  
1 5 10 15

Leu Ala

<210> 31

<211> 35

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and JIK

<400> 31

Leu Gly Glu Met Gly Ser Gly Thr Cys Gly Gln Val Trp Lys Met Arg  
1 5 10 15

Phe Arg Lys Thr Gly His Val Ile Ala Val Lys Gln Met Arg Arg Ser  
20 25 30

Gly Asn Lys  
35

<210> 32

<211> 35

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of JIK, showing high score in the local alignment between MKK7 and JIK

<400> 32

Leu His Glu Ile Gly His Gly Ser Phe Gly Ala Val Tyr Phe Ala Thr  
1 5 10 15

Asn Ala His Thr Ser Glu Val Val Ala Ile Lys Lys Met Ser Tyr Ser  
20 25 30

Gly Lys Gln  
35

<210> 33

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment between MKK7 and JIK

<400> 33

Glu Gln Lys Leu Ser Arg Leu Glu Ala Lys Leu Lys Gln Glu Asn Arg

1 5 10 15

Glu Ala Arg Arg Arg Ile  
20

<210> 34

<211> 22

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of JIK, showing high score in the local alignment between MKK7 and JIK

<400> 34

Gln Lys Gln Leu Ile Ala Leu Glu Asn Lys Leu Lys Ala Glu Met Asp  
1 5 10 15  
Glu His Arg Leu Lys Leu  
20

<210> 35

<211> 16

<212> PRT

<213> Homo sapiens

<220>

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<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and JIK

<400> 35

Glu Ile Asp Gln Lys Leu Gln Glu Ile Met Lys Gln Thr Gly Tyr Leu  
1 5 10 15

<210> 36

<211> 16

<212> PRT

<213> Homo sapiens

<220>

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<223> Partial sequence of JIK, showing high score in the local alignment  
between MKK7 and JIK

<400> 36

Gln Thr His Glu Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu  
1 5 10 15

<210> 37

<211> 19

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and JIK

<400> 37

Gln Thr Gly Tyr Leu Thr Ile Gly Gln Arg Tyr Gln Ala Glu Ile

1

5

10

15

Asn Asp Leu

<210> 38  
<211> 19  
<212> PRT  
<213> Homo sapiens  
  
<220>  
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<223> Partial sequence of JIK, showing high score in the local alignment  
between MKK7 and JIK

<400> 38

Gln Thr Arg Lys Leu Ala Ile Leu Ala Glu Gln Tyr Glu Gln Ser Ile  
1 5 10 15

Asn Glu Met

<210> 39  
<211> 18  
<212> PRT  
<213> Homo sapiens  
  
<220>  
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<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and JIK

<400> 39

Leu Glu Gln Lys Leu Ser Arg Leu Glu Ala Lys Leu Lys Gln Glu Asn  
1 5 10 15

Arg Glu

<210> 40  
<211> 18  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> misc\_feature  
<223> Partial sequence of JIK, showing high score in the local alignment  
between MKK7 and JIK

<400> 40

Leu Glu Gln Arg Val Ser Leu Arg Arg Ala His Leu Glu Gln Lys Ile  
1 5 10 15

Glu Glu  
<210> 41  
<211> 13  
<212> PRT  
<213> Homo sapiens

<220>  
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<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and JIK

<400> 41

Gln Arg Tyr Gln Ala Glu Ile Asn Asp Leu Glu Asn Leu  
1 5 10

<210> 42  
<211> 13  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Partial sequence of JIK, showing high score in the local alignment  
between MKK7 and JIK

<400> 42

Gln Arg Thr Lys Asp Ala Val Arg Glu Leu Asp Asn Leu  
1 5 10

<210> 43  
<211> 10  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<223> Partial sequence of MKK7, showing high score in the local alignment  
between MKK7 and JIK

<400> 43

Thr Cys Ala Glu Lys Leu Lys Lys Arg Met  
1 5 10

<210> 44  
<211> 10  
<212> PRT  
<213> Homo sapiens  
<220>  
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<223> Partial sequence of JIK, showing high score in the local alignment between MKK7 and JIK

<400> 44

Ile Cys Lys Glu Lys Ile Lys Glu Glu Met  
1 5 10

<210> 45  
<211> 17  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> misc\_feature  
<223> Partial sequence of MKK7, showing high score in the local alignment between MKK7 and JIK

<400> 45

Lys His Gly Val Ile His Arg Asp Val Lys Pro Ser Asn Ile Leu Leu  
1 5 10 15

Asp

<210> 46  
<211> 16  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> misc\_feature  
<223> Partial sequence of JIK, showing high score in the local alignment between MKK7 and JIK

<400> 46

Arg His Asp Phe Val Arg Arg Asp Arg Pro Leu Arg Val Leu Ile Asp  
1 5 10 15